claims 3, 14-16 and 18-20 are canceled, and claims 2, 5-8, 21 and 22 are amended. Additionally, claims 24-33 have been added. No new matter has been added to the application by way of new claims 24-33. Upon entry of the amendments, claims 2, 4-13 and 21-33 will be pending in the present patent application. Reconsideration and allowance of all pending claims are requested.

Claim Objections

The Examiner objected to claims 2, 5-8, and 21-22 for containing inconsistencies within the preamble between the dependent and independent claims. Accordingly, Applicants have reviewed the Examiner's objection and amended the claims. Applicants respectfully assert that the claims, as amended, render the Examiner's objection moot. Reconsideration and allowance is requested.

Rejections Under 35 U.S.C. § 112

The Examiner rejected claims 1, 2, 6, 21 and 23 under 35 U.S.C. § 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter the Applicants regard as the invention. Specifically, the Examiner has rejected the claims for the use of the variables "N" and "M" as being unclear and confusing. Applicants respectfully traverse the rejection.

Applicants respectfully assert that the use of the variable "N" to reference both the number of phases of an electromechanical device as well as the number of segment sets within the said device is neither confusing nor unclear to one of ordinary skill in the art. As defined in the present application, a device with N phases will necessarily have N segment sets. For example, a three-phase device, as defined by the instant application, will necessarily have three segment sets. Because the number of segment sets is equal to the number of phases of the device as presented in the application, the use of the identifier "N" for both the segment sets and device phase would not be confusing or

unclear to one of ordinary skill in the art. Accordingly, Applicants respectfully request reconsideration and withdrawal of the instant rejection.

The Examiner has also rejected claims 4 and 6 for the use of the term "a common circular arrangement" within those claims. Applicants have amended claim 6 and believe the claim, as amended, overcomes the Examiner's rejection. It is to be noted that the variable N defines the number of *segment sets* within the device and the variable M refers to the number of *individual segments* within each previously defined *segment set.* Accordingly, when the N *segment sets* are combined in a circular arrangement it necessarily follows that the N *sets* of M *segments* are also combined into the afore-mentioned circular arrangement. Thus, Applicant respectfully asserts that one of ordinary skill in the art would not be confused or mislead by the use of the term "a common circular arrangement" as defined by the instant claims. Applicant respectfully requests reconsideration and withdrawal of the instant rejection.

For the afore-mentioned reasons, Applicants respectfully assert that the instant claims, as amended, are patentable and should not be rejected under 35 U.S.C. § 112, second paragraph. Accordingly, Applicants respectfully request reconsideration and allowance of the pending claims.

Rejections Under 35 U.S.C. § 102

The Examiner in the instant Office Action has rejected claim 1 under 35 U.S.C. § 102 as being anticipated by Searle (US 4,350,914). Applicants have canceled claim 1 and as such need not address the Examiner's rejection within this response.

Rejections Under 35 U.S.C. § 103

The Examiner, in the instant Office Action, rejected claims 2 and 4-6 under 35 U.S.C. § 103(a) as being unpatentable over Searle in view of Varley (US 1,073,059).

The Examiner also rejected claims 7, 21, and 22 under 35 U.S.C. § 103(a) as being unpatentable over Searle in view of Varley, and in further view of Japanese Patent Publication JP 60-182119 (JP '119).

Next, the Examiner rejected claim 8 under 35 U.S.C. § 103(a) as being unpatentable over Searle, in view of Varley, and in further view of Japanese Patent Publication JP-57-42112 (JP '112).

Lastly, the Examiner rejected claim 23 under 35 U.S.C. § 103(a) as being unpatentable over Searle in view of JP '112. Applicants respectfully traverse the rejections.

The burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (PTO Bd. App. 1979). Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent some teaching or suggestion supporting the combination. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984). Accordingly, to establish a *prima facie* case, the Examiner must not only show that the combination includes *all* of the claimed elements, but also a convincing line of reason as to why one of ordinary skill in the art would have found the claimed invention to have been obvious in light of the teachings of the references. *Ex parte Clapp*, 227 U.S.P.Q. 972 (B.P.A.I. 1985).

Turning first to independent claim 2, Applicants respectfully assert that the instant claim, as amended, is patentable over the cited art. Assuming, *arguendo*, the Examiner is able to present art that discloses all of the elements of the instant claims, the Examiner must still present a convincing line of reasoning as to why one of ordinary skill in the art would find the combination obvious. Applicants respectfully assert that the teachings of Searle in conjunction with those of Varley fail to render the instant claim obvious.

The Examiner concedes that the Searle reference fails to disclose the step of "arranging a plurality of segments in a side-by-side orientation along an axis of rotation, the plurality of segments forming one of the N sets of segments." The Examiner employs the Varley reference to satisfy this deficiency. However, the Examiner has failed to present a convincing line of reasoning as to why one of ordinary skill would have made the mental leap from Seale to Varley, and finally conclude with the method of the instant claim. Rather, Varley teaches away from the instant claim by disclosing the insertion of a binding tape 7 across the coil forms 3 in an *intermittent* fashion. Varley discloses at column 7, lines 15-22, that the binding tape 10 is presented to the coil form during *intervals* of the coil wrapping process. Additionally, Varley teaches at column 7, lines 59-64, that the binding tape 10 is to be *severed* at points intermediate to the coil forms. The severing of the tape 10 indicates that the coil forms 3 are not intended to be compiled into any semblance of a set. Accordingly, there is no suggestion in Varley reference that the alleged side-by-side nature of the coil forms could be employed to any semblance of a *continuous* winding process across the said coil forms, or the formation of segments or coils *electrically in series*. Thus, Applicants respectfully assert that independent claim 2 and its respective dependent claim 21 are patentable over the Searle-Varley reference combination.

Turning next to independent claim 4, Applicants respectfully assert that the instant claim is patentable over the cited art. The instant claim, as amended, also recites "arranging a plurality of segments in a side-by-side fashion," as well as, "continuously winding the plurality of segments during step (B) perpendicularly with respect to the axis to form the segments electrically in series with one another." Again, the Examiner has employed the Searle-Varley reference combination as the foundation for his rejection. Applicants respectfully reiterate that the Searle-Varley combination fails to suggest a plurality of segments that are continuously wound, or perpendicular winding to create series-wound sets of segments. Thus, Applicants respectfully assert that independent claim 4 as well as its respective dependent claims 5-8 are patentable over the cited art.

Turning lastly to independent claim 23, Applicants respectfully assert that the instant claim is patentable over the cited art. Applicants believe that the teachings of Searle cannot be combined with those of JP '112 to render the instant claims obvious. As the Applicants read JP '112, the shaft 28 does not rotate. This is based upon the fact that no rotating mechanism is shown in drum 19 as well as the fact that an arrow indicating rotation is lacking throughout all of the drawings. Accordingly, the Searle-JP '112 reference combination fails to disclose "arranging a plurality of segments in a side-by-side orientation along an axis of rotation." Because the Examiner has failed to show that the cited art discloses *all* of the elements of the instant claims as well as a convincing line of reasoning as to why one of ordinary skill in the art would have found the combination obvious, the Searle-JP '112 reference combination fails to support the instant rejection. Thus, Applicants respectfully assert that independent claim 23 is patentable and in condition for allowance.

New Claims

New claims have been added to recite additional features of the present technique not previously claimed, but fully described by the specification as originally filed. Consideration and allowance of the new claims are requested.

Conclusion

In view of the above remarks and amendments set forth above, Applicants respectfully request allowance of the pending claims. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Attached hereto is a marked-up version of the changes made to the drawings and claims by the current amendment. The attached page is captioned **"Version with markings to show changes made."**

Date: 4/2/2002

Respectfully submitted,

PG

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

The claims are amended as follows:

2. (Amended) ~~A method according to claim 1, wherein the winding step includes~~ A method of constructing a segmented wound member of an N phase electromechanical device, comprising:

(A) winding N sets of stator segments, each segment defining a bobbin, the N sets of segments being wound with a single continuous length of wire for each set such that the segments of each set are electrically in series, including

(1) arranging a plurality of segments in a side-by-side orientation along central ~~an~~ axis ~~of rotation~~, the plurality of segments forming one of the N sets of segments;

~~(2) rotating the plurality of segments and a wire dispenser relative to each other about the axis of rotation;~~

(~~3~~2) winding the plurality of segments ~~during the relative rotation of the plurality of segments and the wire dispenser~~ about the central axis; and

(3) repeating steps (1) and (2) ~~the arranging step (1), the rotating step (2) and the winding step (3)~~ for each of the remaining sets of segments; and

(B) combining the N sets of segments in a common circular arrangement to form the wound member.

4. (Amended) A method of winding segments of a segmented wound member of an electromechanical device, comprising:

(A) arranging a plurality of segments in a side-by-side orientation along an axis of rotation, each segment of the plurality of segments defining a bobbin;

(B) rotating at least one of the plurality of segments and a wire dispenser relative to each other about the axis of rotation; and

(C) continuously winding the plurality of segments during ~~the relative rotation of the plurality of segments and the wire dispenser~~ step (B) perpendicularly with respect to the axis to form the segments electrically in series with one another.~~; and~~

~~(D) combining the plurality of segments in a circular arrangement to form the wound member.~~

5. (Amended) ~~A~~ The method ~~according to~~ of claim 4, wherein, during the winding step, the segments are wound with a single continuous length of wire.

6. (Amended) ~~A~~ The method ~~according to~~ of claim ~~4~~ 30, wherein the arranging, rotating, winding ~~and combining~~ steps are performed N times, N being equal to a number of phases of the electromechanical device, and wherein a total of N sets of M segments are wound for the electromechanical device, M being determined by a number of poles of the electromechanical device and being equal to the number of segments that re arranged, rotated, and wound during each performance of the arranging, rotating, and winding steps, and wherein the N sets of M segments are combined into ~~a~~ the common circular arrangement.

7. (Amended) ~~A~~ The method ~~according to~~ of claim 4, wherein the plurality of segments rotate relative to the wire dispenser, the wire dispenser being substantially stationary during at least a portion of the winding step.

8. (Amended) ~~A~~ The method ~~according to~~ of claim 4, further comprising moving the wire dispenser along an axis that is parallel to the axis of rotation.

21. (Amended) ~~A~~ The method ~~according to~~ of claim 2, wherein, during the rotating step (2), relative rotation between the plurality of segments and the wire dispense is established by virtue of the plurality of segments rotating and the wire dispenser remaining stationary.

22. (Amended) ~~A~~ The method ~~according to~~ of claim 4, wherein, during the rotating step (B), relative rotation between the plurality of segments and the wire dispenser is established by virtue of the plurality of segments rotating and the wire dispenser remaining substantially stationary.

The following new claims have been added:

24. (New) The method of claim 2, wherein in step (2) the plurality of segments are rotated relative to a wire dispenser about the central axis.

25. (New) The method of claim 2, wherein each set includes four segments.

26. (New) The method of claim 2, wherein N is three.

27. (New) The method of claim 2, wherein the segments are held in a rotary clamp during the winding step.

28. (New) The method of claim 27, wherein the segments are separated by nests in the rotary clamp.

29. (New) The method of claim 2, wherein the segments engage one another during the winding step.

Sub F 4 30. (New) The method of claim 4, further comprising combining the plurality of segments in a circular arrangement to form the wound member.

31. (New) The method of claim 4, wherein the segments are held in a rotary clamp during the winding step.

32. (New) The method of claim 31, wherein the segments are separated by nests in the rotary clamp.

Sub F 5 33. (New) The method of claim 4, wherein the segments engage one another during the winding step.

D 7 Concluded